

Cancer Screening Uptake in the Catchment Area: Incorporating Community Health Center Data Into Catchment Area Assessment

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1. Background

Comprehensive Cancer Centers (CCCs) have an obligation to describe and address cancer burden in their catchment areas. Ensuring equitable uptake of cancer screening is one mechanism by which CCCs can rapidly improve cancer outcomes. Some CCCs use the U.S. Centers for Disease Control and Prevention (CDC) Population Level Analysis and Community Estimates (PLACES) to estimate cancer screening uptake. However, these estimates cannot be separated into demographic, socioeconomic, or health system-specific subgroups to analyze within a geographic location.

As most screenings are initiated in primary care settings, Community Health Centers (CHCs) play an important role in providing primary care to vulnerable groups—in both urban and rural settings—who bear a disproportionate cancer burden. Understanding screening data of CHCs represents an opportunity for CCCs to better understand how well the cancer prevention needs of this population are being met in their catchment areas. CHCs are required to report cancer screening data through the Uniform Data System (UDS) annually to receive Health Center Program designation and federal benefits, and this could provide an important surveillance tool for CCCs.

2. Goals

Better understanding differences in the screening data provided by PLACES and UDS may shed light on the utility of UDS data and highlight targeted opportunities for improving screening.

3. Solutions and Methods

We compared 2022 population-level PLACES estimates for breast, cervical, and colorectal screening uptake to 2022 CHC screening statistics reported in UDS for the 15-county Case Comprehensive Cancer Center (Case CCC) catchment area.

4. Outcomes

In 2022, there were 1,487 CHCs across the U.S., serving 31,556,324 people. Compared to the national population, CHCs disproportionately serve populations noted to experience greater disparities in cancer mortality, including Hispanics, non-Hispanic Blacks, non-insured individuals, and publicly insured individuals. Approximately 44.4 percent of service recipients are below the federal poverty level, compared to 12.5 percent of residents nationally.

The Case CCC catchment area includes 18 CHCs that served 227,640 patients in 2022. The range of breast cancer screening uptake estimates by PLACES was 67.9 to 77.2 percent across the 15 counties (mean 73.1%), versus UDS uptake of 12.3 to 71.6 percent across the 18 CHCs (median 48.1%). PLACES cervical cancer screening uptake estimates were between 79.7 and 85.1 percent (mean 82.9%), versus UDS uptake of 19.3 to 72.1 percent (median 48.9%). PLACES colorectal cancer screening uptake estimates were between 64.0 and 72.4 percent (mean 71.1%), versus UDS uptake of 5.9 to 64.6 percent (median 34.5%).

5. Lessons Learned and Future Directions

These data highlight the large range, and overall lower level, of screening uptake within CHCs in the catchment area. Even compared to counties with the lowest screening uptake PLACES estimates, CHCs still performed worse. UDS data could be an important adjunct to PLACES data for understanding the screening needs of many of the most medically underserved residents.

While PLACES estimates screening uptake in geographic areas, UDS data are tied to a specific health care delivery system, allowing CCCs to identify CHCs that may need additional support in adopting and sustaining evidence-based cancer screening strategies. The UDS provides a built-in surveillance system that will help evaluate impact of CCC efforts, harnessing a targeted quality improvement approach to reducing the burden of cancer.